

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A peptide vector comprising a leader peptide, a linker DNA, and a desired gene nucleic acid sequence, wherein said linker DNA is double-stranded, and wherein only one strand of said linker DNA is covalently bound to said leader peptide.
2. (Currently amended) The peptide vector according to claim 1, wherein the leader peptide ~~comprising sequence ID. No. 1~~ comprises SEQ ID NO:1 or a variant of SEQ ID NO:1 in which the amino acid residue at position 2 is isoleucine; position 4 is leucine; position 10 is arginine; position 11 is lysine; or position 13 is leucine, isoleucine, arginine, glutamine, asparagine or serine; or a combination of any of the foregoing.
3. (Currently amended) The peptide vector according to ~~claims 1 to 2~~ claim 1 or claim 2, wherein the linker DNA ~~comprising sequence ID. Nos. 2 and 3~~ comprises SEQ ID NO:2 and SEQ ID NO:3.
4. (Currently amended) A ~~peptide-DNA complex peptide vector~~ peptide vector comprising a peptide ~~of sequence ID. No. 1~~ having the sequence shown in SEQ ID NO:1, or a variant of SEQ ID NO:1 in which the amino acid residue at position 2 is isoleucine; position 4 is leucine; position 10 is arginine; position 11 is lysine; or position 13 is leucine, isoleucine, arginine, glutamine, asparagine or serine; or a combination of any of the foregoing, and a DNA of sequence ID. Nos. 2 and 3, a DNA having the sequence shown in SEQ ID NO:2, and a DNA having the sequence shown in SEQ ID NO:3.
5. (Currently amended) A method of producing a ~~peptide-DNA complex peptide vector~~ peptide vector comprising: covalently linking ~~[[the]] a peptide of sequence ID. No. 1~~ a peptide having the sequence shown in SEQ ID NO:1 or a variant of SEQ ID NO:1 in which the amino acid residue at position 2 is isoleucine; position 4 is leucine; position 10 is arginine; position 11 is lysine; or position 13 is leucine, isoleucine, arginine, glutamine, asparagine or serine; or a combination of any of the foregoing; and the DNA of sequence ID No. 2, a DNA having the sequence shown in SEQ ID NO:2; and hybridizing the DNA of sequence ID. No. 3 a nucleic acid having the DNA sequence shown in SEQ ID NO:3 to the DNA of sequence ID No 2 a nucleic acid having the DNA sequence shown in SEQ ID NO:2.
6. (Currently amended) A method of introducing and expressing a desired gene nucleic acid sequence comprising infecting target cells with a peptide vector which

~~comprising~~ comprises a leader peptide, a linker DNA, and a desired ~~gene~~ nucleic acid sequence, wherein said linker DNA is double-stranded, and wherein only one strand of said linker DNA is covalently bound to said leader peptide.

7. (Currently amended) The method according to claim 6, wherein the leader peptide ~~comprising sequence ID No. 1~~ comprises SEQ ID NO:1 or a variant of SEQ ID NO:1 in which the amino acid residue at position 2 is isoleucine; position 4 is leucine; position 10 is arginine; position 11 is lysine; or position 13 is leucine, isoleucine, arginine, glutamine, asparagine or serine; or a combination of any of the foregoing.

8. (Currently amended) The method according to ~~claims 6 to 7~~ claim 6 or claim 7, wherein the linker DNA ~~comprising sequence ID Nos. 2 and 3~~ comprises a DNA having the sequence shown in SEQ ID NO:2, and a DNA having the sequence shown in SEQ ID NO:3.